

**REMARKS**

Claims 1-42 are pending in the application, and stand rejected. Claims 1, 30, 38, 40, and 42 are currently amended.

**Claim Rejections 35 USC 101**

Claims 1 – 42 were rejected for relating to non-statutory subject matter.

Claims 1, 30, 38 and 42 have been amended to define a plurality of computers connected over a network, so that the negotiation is carried out over the network. It is recognized that two computers connected via a network are patentable subject matter and constitute a specific machine as specified for a process claim in the recent Bilsky decision.

Nevertheless the opportunity has been taken to specify that the parts concerned comprise hardware, as if memory, computers, networks and interfaces are conceivable without hardware.

Furthermore the hardware is not restricted to the preamble and is specifically tied to the steps of the method.

Claim 40 has been amended to specify a memory, a data structure on the memory, a processor and two interfaces. These are statutory articles and are not nominal recitations of structure since the negotiation is the *modification of the actual data structure referred to* – see in re Bilsky where a transformation of an article was found to be statutory. Nevertheless the opportunity has been taken to underline that the articles comprise hardware.

Thus each claim explicitly recites hardware and comprises a specific machine.

Applicant is in fact rather surprised to learn that networks, computers, servers, and memory are not as a matter of course regarded as hardware by the USPTO and that it is necessary to recite in the claims at all that they are hardware.

### **Claim Rejections – 35 USC 102**

The Examiner rejected claims 1 -42 under 35 USC 102(e) as being anticipated by Kennedy et al (US 6,055,519).

As argued in the previous response, Kennedy teaches a computer implemented system for *assisting* human or automated planners with negotiation process of sales of goods, see col. 14, lines 34-41:

"The present invention manages the negotiation process and *provides* human and automated planners with *information* necessary to effectively plan and schedule the procuring, manufacturing, transportation, warehousing, and shipping operations necessary to deliver requested items. The basic information provided is the state of the negotiation for each order (e.g. whether the order is Requested, Promised, or Accepted)." (emphasis added)

Kennedy is configured to *support* the negotiation process which is operated *by the users themselves*. Kennedy provides the user with *information* which could be *helpful for planning and tracking the negotiation* but does *not* relate to the user's intentions, objectives and desires *or* generate requests itself, contrary to the clearly expressed requirements of present claim 1.

Examiner argues that the previous amendments fail to distinguish over Kennedy since, although in Kennedy it is clear that the actual negotiation is manual, it is not apparent from the present claims that the intentions and their modification are carried out within the processor.

Applicant has thus amended each of the independent claims 1, 30, 38 and 40 to specify that the intentions are held within an intention data structure – see page 16 lines 1 – 2 of the original disclosure. The negotiating, modification and unification is carried out wholly within this data structure and thus excluding the case of manual negotiation as per Kennedy.

Claim 42 refers to a method of creating a minimizing goal for a level within a goal program and recites:

- "(a) providing in a manner accessible to said parties at said electronic computers comprising hardware over said network comprising hardware a goal program having a plurality of levels in a hierarchy, at least some of said levels including constraints;
- (b) identifying constraints within a respective level at said electronic computers comprising hardware;
- (c) normalizing each of said identified constraints respectively to render said identified constraints mutually comparable, so as to obtain normalized constraints at said electronic computers comprising hardware; and
- (d) combining said normalized and thus mutually comparable constraints to create said minimized goal for said level at said electronic computers comprising hardware, thereby to provide a level within said hierarchy having a minimized goal and thus providing levelwise solution of said goal program."

Claim 42 has been amended to further particularize that the levels are part of a hierarchy within a goal program and that minimization may be carried by selecting a single level of the hierarchy and minimizing for the constraints at that level.

No goal program, no hierarchy, no minimization, no levels and no constraints are taught in Kennedy, certainly not solving a goal program by selecting a single level from a hierarchy and minimizing for the constraints at that level.

In order to minimize between different constraints it is necessary first of all to carry out normalization. Normalization is recited in claim 42.

We note that minimization is carried one level at a time, and may start with the top most important level, then the second one and so on.

It was noted in the previous response that 'normalizing' is a concept known in the art in which disparate concepts such as price, date, quality and location are expressed within a unified framework. Colloqually one can think of it as putting 'oranges and bananas' on an equal footing. This enables for example minimizing goals related to these concepts.

As explained below and noted in the previous response, Kennedy neither mentions explicitly nor implicitly any concept even vaguely related to normalization.

Examiner points in this regard to Kennedy columns 11 and 12, but Kennedy columns 11 and 12 do not mention or hint at the concept of normalization.

Applicant stresses he has read and reread every line of Kennedy columns 11 and 12 and can find *no hint* of the concept of *normalization*, as it would be understood by the person skilled in the art.

Lack of normalization is significant. Without such normalization he *cannot* minimize quantities that are not measured in the same units, such as combinations of dates and locations. He cannot even minimize just locations by themselves as locations are non-numeric.

That is to say not only does he not *teach* minimization, without normalization he *cannot* perform minimization. Therefore minimization, also provided for in the claim, is not even hinted at.

Thus Kennedy columns 11-12 does not teach or hint at normalization and does not teach or hint at minimization.

Furthermore Kenedy at no point relates to multiple *levels* of decision making, contrary to the requirements of claim 42. At the most he allows one to *queue* a first request while dealing with a second request. There is no indication in the passages quoted of a hierarchy of requests or considerations.

Kennedy does not relate to creating a *minimizing* goal for a level within a goal program. As discussed above, Kennedy is concerned with managing the negotiating process and does not take part in the actual negotiation process itself and especially not in forming offers and counter offers.

Accordingly, Kennedy does not create a minimizing goal as recited in claim 42.

The Examiner points to Kennedy columns 11 and 12, but the terms "normalize" and "minimize" simply do not appear in this passage. Perhaps the Examiner is considering the term "increments" which appears in column 12 line 16, but this is of no relevance to the claim. The term "maximize" also appears, but this is the opposite of the claimed "minimizing".

More particularly, applicants submit that col. 11-12 of Kennedy specifies something else entirely. Col. 11, lines 16-18: of Kennedy teaches "*Promising policy*" specifies the constraints on offering a Promise for the corresponding Request. The following describes the available promising policies." Thus, Kennedy indeed has

constraints. The constraints of Kennedy can be chosen as one of a given group of constraints.

However the present claim defines that constraints are provided at different levels in a goal program, and at each level the different constraints are minimized.

There is no teaching in Kennedy of identifying a constraint *within a respective level*, nor of *normalizing* anything. Kennedy columns 11 and 12 do not mention normalizing. There is certainly no teaching of normalizing of an *identified constraint*.

It is further noted that there is no possibility in Kennedy of normalization of an identified constraint. This is because the constraint is *one of a predefined listed group*. The constraints are not numerical and therefore cannot *even in principle* be minimized.

In addition, Kennedy does not teach nor suggests *combining normalized constraints for creating a minimised goal for a level*. This is because the constraints *are not organized in levels*, contrary to the requirements of claim 42, and furthermore the constraints are not numerical and the non-numerical constraints of Kennedy thus cannot be minimized, even had it occurred to Kennedy to try and do so. Minimization is a feature of claim 42. In point of fact no such thing occurred to Kennedy, and the passage pointed out by the Examiner, namely columns 11 and 12 of Kennedy, teaches only one feature of claim 42, namely constraints. *No other feature of the claim is hinted at or suggested by Kennedy*.

Examiner also points to the passage from column 4 line 35 to column 5 line 50. However this passage does not deal with a plurality of levels, each of said levels comprising constraints, contrary to the requirement of claim 42. This passage merely teaches moving from one state to another as different decisions are made. There is no indication of levels.

Nevertheless, in order to accelerate prosecution, applicant has amended claim 42, as mentioned above, and has added to claim 42 further features specifying more closely the invention for which protection is required. It is now specified that the levels are of a hierarchy of levels within a goal program and that a separate minimization is carried out for a given level to give a levelwise solution to the goal program.

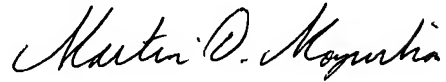
No such thing is taught in Kennedy, which has no hierarchy, no normalization, no goal program, no minimization, no levels, and certainly no minimization of a given level to provide levelwise solution of a goal program.

In view of the arguments above it is submitted that claims 1, 30, 38, 40 and 42 are patentable over the cited art. The remaining claims mentioned in this section of the Office Action are believed to be allowable as being dependent on an allowable main claim.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome.

In view of the foregoing, it is respectfully submitted that all the claims now pending in the application are allowable. A Notice of Allowance is therefore respectfully requested.

Respectfully submitted,



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**Enclosure:**

- Request for Continued Examination (RCE)